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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,617	02/09/2004	Sou Phong Lec	51529/JDC/A23	8682
23363	7590	03/13/2006	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			SASTRI, SATYA B	
PO BOX 7068			ART UNIT	
PASADENA, CA 91109-7068			PAPER NUMBER	

1713

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/774,617

Applicant(s)

LEE, SOU PHONG

Examiner

Satya B. Sastri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/13/04, 6/17/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This office action is in response to application filed on February 9, 2004. *Claims 1-48* are now pending in the application.

#### *Claim Rejections - 35 USC 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. *Claims 1, 3, 4, 6-16, 19-23, 26-31, 34, 37, 40-46* are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanhoye et al. (US 5,908,908) in view of Holguin et al. (US 6,706,836 B1).

Prior art to Vanhoye et al. concerns pressure sensitive adhesive polymers obtained by emulsion polymerization of (a) 40-95% by wt. of at least one (meth)acrylic or vinyl monomer capable of resulting in a homopolymer which has a Tg below  $-40^{\circ}\text{C}$ , (b) 2-50% by wt. of at least one (meth)acrylic or vinyl monomer capable of resulting in a homopolymer which has a Tg of  $0^{\circ}\text{C}$  or higher, (c) 0.5 to 6% by wt. of carboxylic (meth)acrylic monomer (d) 0 to 5% by wt. of at least one (meth)acrylic monomer ethoxylated with 1-20 moles of ethylene oxide and (e) 0.05 to 1% by wt. of at least one (meth)acrylic monomer containing a ureido group and other optional comonomer (abstract). Monomer (a) qualifies as a soft monomer and (b) as a hard monomer

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(column 2, lines 54-67). Monomer (e) includes alkyl imidazolidone containing monomers (column 3, lines 5-10). The polymer is prepared in the presence of anionic and nonionic surfactants (column 3, lines 44-54). The polymerization composition may include chain transfer agents based on alkyl mercaptans (column 4, lines 29-40).

The difference between the prior art and the instant invention is that the prior art does not teach trifluoroalkyl (meth)acrylate monomers in the copolymer composition.

Secondary reference to Holguin et al. relates to pressure sensitive adhesives comprising hydroxyalkyl (meth)acrylates and acrylic acid. The adhesives may be useful in labels and tape application (column 11, lines 37-40). The compositions may also be useful as coatings for inkjet printing (abstract). The prior art teaches that crosslinkers and surfactants may be added to the polymerization mixture in amounts of 1-10% by wt. to achieve optimum coating performance (column 8, lines 8-22). Additionally, the reference teaches that inclusion of trifluoroalkyl (meth)acrylate monomers in the copolymer composition results in improved sheet feeding performance during inkjet printing (column 10, lines 10, 30-45). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made trifluoroalkyl (meth)acrylate monomers in the copolymer compositions disclosed by Vanhoye et al. and thereby obtain the instant invention.

It is noted that the preamble merely provides for the environment in which the composition is used. The secondary reference teaches that the (meth)acrylic copolymer compositions are useful as adhesives and inkjet coating compositions.

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4. ***Claims 2, 5, 17, 18, 24, 25, 32, 33, 35, 36, 38, 39*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanhoye et al. (US 5,908,908) in view of Holguin et al. (US 6,706,836 B1) and EP 0142172 A2 ('172).

The prior art to Vanhoye et al. and Holguin et al. are presented above in paragraph 3 and are incorporated herein by reference.

The difference between the combined teachings of prior art and the instant invention is that the prior art does not teach the use of monomers based on urethane diacrylates in the polymer composition.

The secondary reference teaches that crosslinking adhesives and coatings are useful to achieve optimum coating performance (column 8, lines 8-22). EP '172 discloses adhesive compositions comprising acid monomers and multifunctional vinyl crosslinking monomers such as urethane diacrylate oligomers (abstract). Rapidly curable polymers with durable bonding result from using urethane diacrylate oligomers as crosslinking monomers (page 3, lines 15). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include multifunctional vinyl crosslinking monomers such as urethane diacrylate oligomers in the polymeric compositions of Vanhoye et al. and thereby obtain the instant invention.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

March 8, 2006



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